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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/555,857 | 09/25/2006 | Michel Gillard | SGK-028 | 4435 |

24964 7590 06/23/2011
GOODWIN PROCTER LLP
ATTN: PATENT ADMINISTRATOR
620 Eighth Avenue
NEW YORK, NY 10018

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| EXAMINER |
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USELDING, JOHN E

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| ART UNIT | PAPER NUMBER |
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1763

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| NOTIFICATION DATE | DELIVERY MODE |
|-------------------|---------------|

06/23/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

bdowd@goodwinprocter.com
patentny@goodwinprocter.com

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|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/555,857 | Applicant(s) GILLARD ET AL. | |
| | Examiner JOHN USELDING | Art Unit 1763 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 51, 53-57, 60, 67 and 68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 56, 57, 60 and 67 is/are allowed.
- 6) ☒ Claim(s) 51, 53-55, and 68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/10/2011 has been entered.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

Claims 51, 55, and 68 are rejected under 35 U.S.C. 102(b) as being anticipated by Plehiers et al. (WO 2003/027124).

Regarding claim 51: Plehiers et al. teach hydrolysable paint compositions (page 1, lines 12-20) comprising a compound that is an organosilyl ester of a carboxylic acid wherein the carboxylic acid part of the ester is saturated at the alpha carbon (page 4, lines 1-14). Several components in Plehiers et al. can be considered co-binders such as the

other monomers and comonomers in the binders (page 8, lines 9-18). Plehiers et al. teach an antifoulant (page 1, lines 5-20).

Regarding claim 55: Plehiers et al. teach that the comonomers are acrylates (page 8, lines 9-12).

Regarding claim 68: the silyl ester of Plehiers et al. is capable of hydrolyzing to release an active agent

Claims 51, 54, and 68 are rejected under 35 U.S.C. 102(b) as being anticipated by Slater et al. (5,331,074).

Regarding claim 51: Slater et al. teach compositions comprising a compound that is an organosilyl ester of a carboxylic acid wherein the carboxylic acid part of the ester is saturated at the alpha carbon (column 6, lines 46-68). Since the compound is being used as a crosslinking agent it is considered a binder component. Slater et al. teach that their composition is an anti-fouling paint composition (column 1, lines 5-13, 25-27; column 9, lines 30-36), and therefore comprises an antifoulant. Since the compound is being used as a crosslinking agent it is considered a binder component. The composition uses an excess of crosslinking agent (column 5, lines 34-53), therefore, after the crosslinking occurs there will still be remaining organosilyl esters of a carboxylic acid in the composition. Slater et al. teach co-binders (column 1, lines 64-68; Examples).

Regarding claims 54: Slater et al. teach an organosilyl ester of the formula $(Y^1)_aSi(OCOR^1)_{4-a}$ (column 6, lines 46-56). Y^1 is a hydrocarbon radical having 1 to 10

carbon atoms (column 6, lines 1-2). R¹ is a hydrocarbon group that is without aliphatic unsaturation (column 6, lines 48-52), which means that the alpha carbon is unsaturated. All the example compounds meet the Applicant's formula and have more than one acyloxy group attached to the silicon atom (column 6, lines 57-68).

Regarding claim 68: the silyl ester of Slater et al. is capable of hydrolyzing to release an active agent

Claim Rejections - 35 USC § 103

Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Slater et al. (5,331,074) as applied to claim 51 above.

Regarding claim 53: by mixture, the Examiner understands this term to mean more than one type of silyl ester is present. Slater et al. teach using mixtures of crosslinking agents (column 6, lines 44-45). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a mixture of acyloxysilane crosslinking agents (column 6, lines 46-67) in the composition to provide crosslinking of the polymers.

Allowable Subject Matter

Claims 56, 57, 60, and 67 are allowable over the prior art. Slater et al. and Plehiers et al. fail to teach using the claimed compounds and the prior art fails to provide a motivation to include such compounds in the invention of Slater et al. or Plehiers et al.

Response to Arguments

Applicant's arguments filed 6/10/2011 have been fully considered but they are not persuasive.

The Applicant has made the argument that the organosilyl ester of Plehiers is not present in the final paint composition. This is not persuasive because it is present in a composition that is used for painting. It is noted that a "paint composition" is merely a recitation of an intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

The Applicant has asserted that Plehiers does not teach an antifoulant. It is noted that the claims do not require an additional component that is an antifoulant. The organosilyl ester is sufficient. Additionally Plehiers teaches an antifoulant (page 1, lines 5-20).

The Applicant has asserted that Slater does not teach hydrolysable antifouling paint compositions. This is not persuasive because Slater teaches antifouling paint compositions (column 1, lines 5-13, 25-27; column 9, lines 30-36) that are hydrolysable (column 2, lines 6-8; column 3, lines 11-13; column 7, lines 11-15). The claims do not specify whether the composition is hydrolysable before or after application to a surface.

The Applicant has made the argument that Slater teaches an entirely different approach to antifouling. This is not relevant as long as all of the claim limitations are met.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN USELDING whose telephone number is (571)270-5463. The examiner can normally be reached on Monday-Thursday 6:00am-4:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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